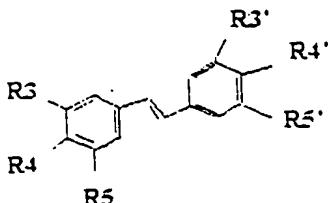


CLAIMS

1. Stilbene derivatives having formula I



wherein

R3, R4 and R5 and R3', R4' and R5' are identical or different and represent H, OH, O-alkoxy or hal, said alkoxy group being a C1-C6 alkoxy and "hal" being F, Cl or CF₃, with the proviso that one of R4', R3 and R5 or R4, R3' and R5' does not represent OH, OCH₃ or OCH₂CH₃ when the two other substituents are both OH, OCH₃, OCH₂CH₃, respectively,

and the symmetrical derivatives.

2. The trans isomers of the stilbene derivatives of claim 1.
3. The trans isomers of claim 2, wherein R3 and R5 are hal.
4. The trans isomers of claim 3, wherein R3' or R4' is hal, alkoxy or hydroxy, and R5' is H.
5. The trans isomers of claim 2, wherein R3 and R5 are Cl.
6. The trans isomers of claim 5, wherein R3' is H, and R4' or R5' is Cl or methoxy.
7. The trans isomers of claim 2 selected in the group comprising (E)-1-(4'-trifluoromethylphenyl)-2-(3,5-ditrifluoromethylphenyl-ethene, (E)-1-(4'-methoxyphenyl)-2-(3,5-dichlorophenyl)-ethene, and (E)-1-(4'-chlorophenyl)-2-(3,5-

dichlorophenyl-ethene which bound to AhR with respective relative binding affinity of 52.1, 112.0 and 130.0, without detectable affinity for ER.

8. The symmetrical derivatives of the trans isomers of claim 7, particularly the derivatives with R3', R5' and R4 or R3', R5' are hal. and R4 is OH or alkoxy.

9. The use of the stilbene derivatives according to claim 7 as antagonists of AhR ligands to treat pathologies including AhR ligands, by administering to a patient a therapeutically effective amount of the stilbene derivative in need of such treatment.

10. Pharmaceutical compositions comprising an effective amount of at least one stilbene derivative according to claim 1, with a pharmaceutically acceptable carrier.

11. The pharmaceutically compositions of claim 10 in a form for administration by the oral, nasal, parenteral or topical route.

12. The pharmaceutical compositions of claim 11, wherein said form is a gel, capsules, drops, syrup or alcohol syrup, for administration by the oral route, spray or drops for administration by the nasal route, solution for administration by the parenteral route, and cream, ointment, shampoo or lotion for application by the topical route, the vehicle comprising an oil or a pharmaceutically acceptable alcohol.

13. The pharmaceutical compositions of claim 10, said comprising the administration at a dosage from 0.1 mg to 5 g/day, especially from 20 to 200 mg/day and in particular from 10 to 100 mg/day.

14. The use of a pharmaceutical composition of claim 10, for the treatment of conditions selected from dermatitis, acne, psoriasis, hyperkeratotic lesions, eczema, or skin aging and wrinkling associated with common environmental exposure to AhR ligands, by administering to a patient a therapeutically effective amount of said pharmaceutical composition to a patient in need of such treatment.

15. The use of pharmaceutical compositions of claim 13 for preventing or avoiding the development of cold or flu symptoms related to viral infections aggravated by AhR ligands, by administering to a patient a therapeutically effective amount of said pharmaceutical composition.
16. The use of a pharmaceutical composition of claim 10 for the prevention of AhR ligand-induced triggering of HIV (and other viruses) gene expression and progression of AIDS in a patient, particularly for the treatment of viral infections such as HIV-induced AIDS, by administering to a patient a therapeutically effective amount of said pharmaceutical composition.
17. The use of a pharmaceutical composition of claim 10, for the prevention of prion-induced Spongiformis Encephalitis in a human and livestock, by administering to said human or livestock a therapeutically effective amount of said pharmaceutical composition.
18. The use of a pharmaceutical composition as claimed in claim 10, for the prevention of osteoporosis in reproductive age women and for the prevention and treatment of osteoporosis, alone or either in association with hormone replacement therapy or calcium and vitamin D in post-menopausal and elderly women, by administering to a patient a therapeutically effective amount of said pharmaceutical composition.
19. The use of a pharmaceutical composition of claim 10, in the treatment of inflammatory conditions caused by excessive nitric oxide and/or immunoglobulin E production such as: atopic dermatitis, rheumatoid and osteo-arthritis, neurodegenerative diseases (such as Alzheimer, multiple sclerosis, amyotrophic lateral sclerosis), diabetes, by administering to a patient a therapeutically effective amount of said pharmaceutical composition.

20. The use of a pharmaceutical composition of claim 10 for reduction of fever associated with bacterial, viral, or allergic illnesses, by administering to a patient a therapeutically effective amount of said pharmaceutical composition.
21. The use of a pharmaceutical composition of claim 10 for the treatment of obstetrical and gynecologic conditions such as endometriosis, fibroids (leiomyoma), pre-eclampsia and recurrent abortion in a patient by administering to a patient a therapeutically effective amount of said pharmaceutical composition.
22. Use of the stilbene derivatives according to claim 10, as food additive by adding an effective amount of the stilbene derivative to a food selected from a powdered or liquid formula, cereal, and in canned food to prevent the toxic effects of environmental exposure to AhR ligands.
23. Use of the stilbene derivatives according to claim 10, for impregnating a cigarette filter, by adding an effective amount of the stilbene derivative to said cigarette filter.
24. The use of a pharmaceutical composition of claim 10, for the treatment of condition selected from the group consisting of dermatitis, acne, psoriasis, hyperkeratotic lesions, eczema, skin aging and wrinkling associated with common environmental exposure to AhR ligands cold or flu symptoms related to viral infections aggravated by AhR ligands, AhR ligand-induced triggering of HIV (and other viruses) gene expression and progression of AIDS, prion-induced Spongiformis Encephalitis, osteoporosis, alone or either in association with hormone replacement therapy or calcium and vitamin D in post-menopausal women, inflammatory conditions caused by excessive nitric oxide, rheumatoid and osteo-arthritis, neurodegenerative diseases, diabetes, fever associated with bacterial, viral, or allergic illnesses, endometriosis, fibroids (leiomyoma), pre-eclampsia and recurrent abortion by administering to a patient in need of such treatment a therapeutically effective amount of said pharmaceutical composition.

25. The use of a pharmaceutical composition of claim 8, for the treatment of condition selected from the group consisting of dermatitis, acne, psoriasis, hyperkeratotic lesions, eczema, skin aging and wrinkling associated with common environmental exposure to AhR ligands cold or flu symptoms related to viral infections aggravated by AhR ligands, AhR ligand-induced triggering of HIV (and other viruses) gene expression and progression of AIDS, prion-induced Spongiformis Encephalitis, osteoporosis, alone or either in association with hormone replacement therapy or calcium and vitamin D in post-menopausal women, inflammatory conditions caused by excessive nitric oxide, rheumatoid and osteo-arthritis, neurodegenerative diseases, diabetes, fever associated with bacterial, viral, or allergic illnesses, endometriosis, fibroids (leiomyoma), pre-eclampsia and recurrent abortion by administering to a patient in need of such treatment a therapeutically effective amount of said pharmaceutical composition.